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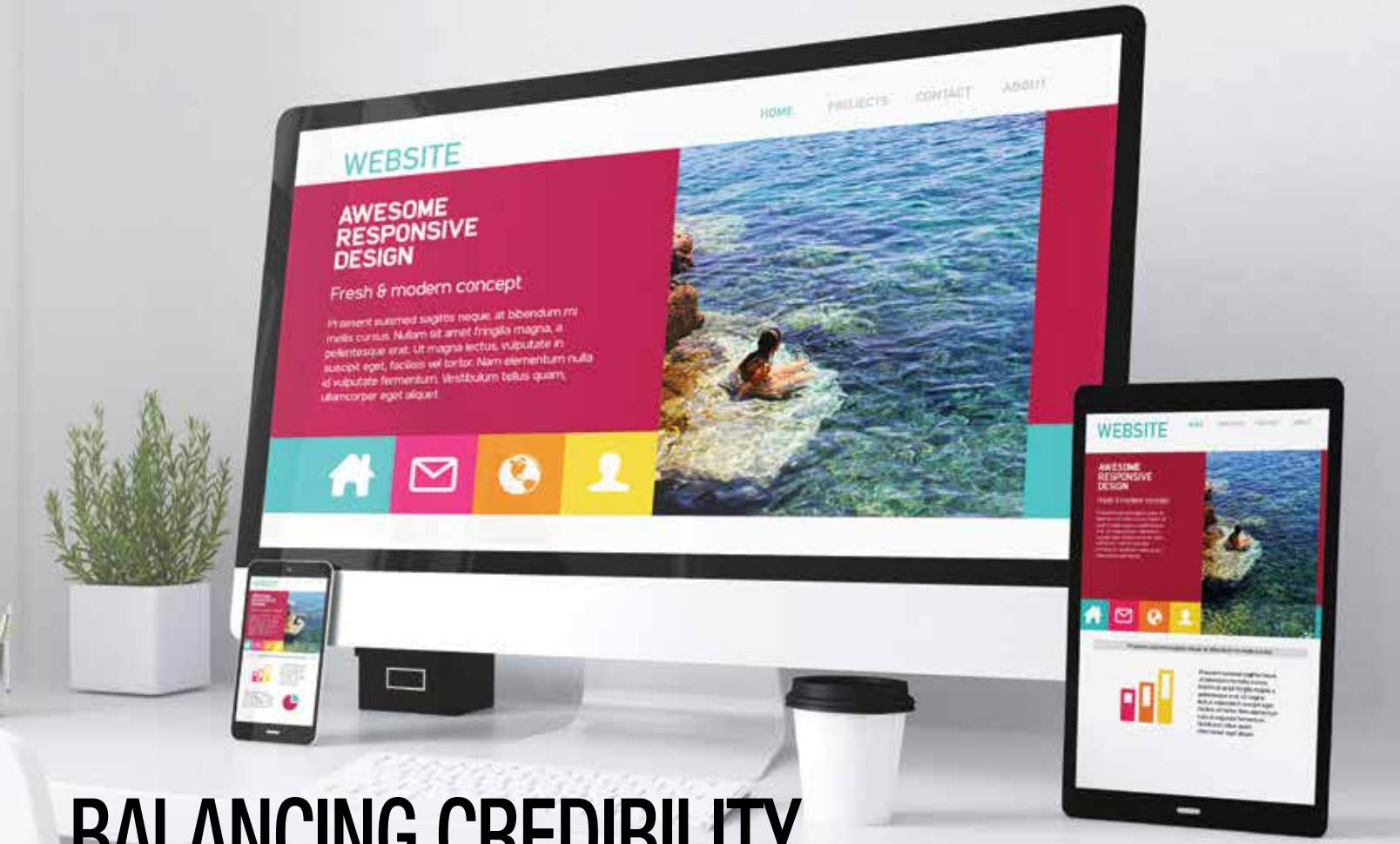

BALANCING CREDIBILITY WITH RESPONSIVE DESIGN 6

DESIGNING WIKI TEMPLATES FOR TODAY'S WEB 11

CREATING BEAUTIFUL ONLINE CONTENT WITH WEB FONTS 15

SHOOTING THE SERIF IN VIRTUAL REALITY 18

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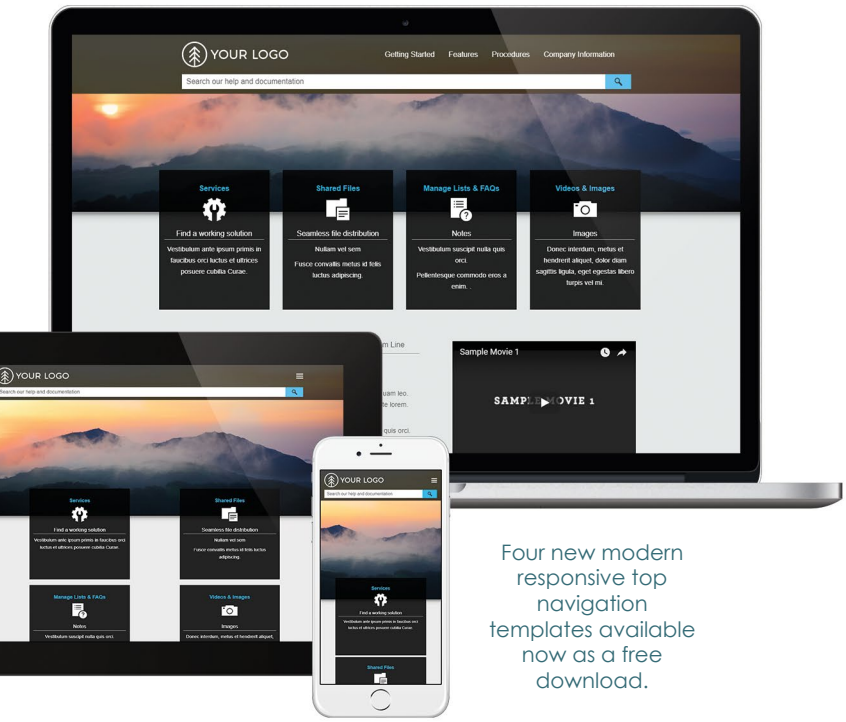

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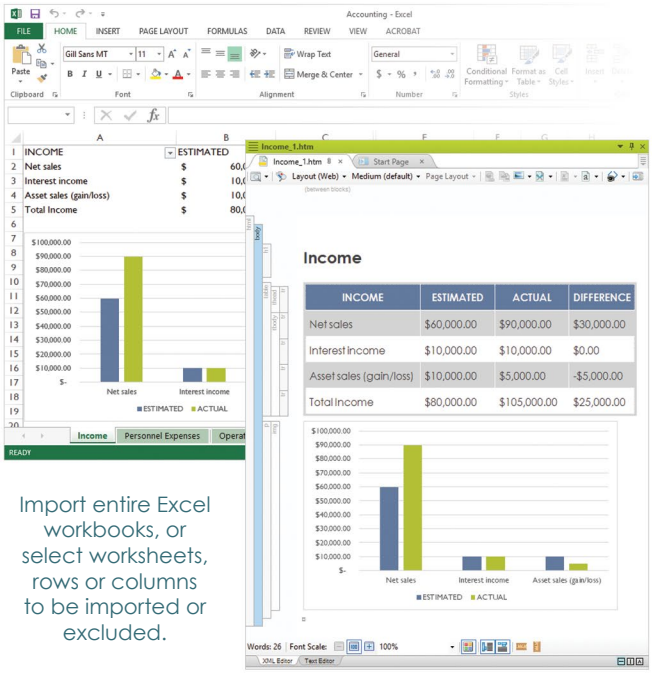
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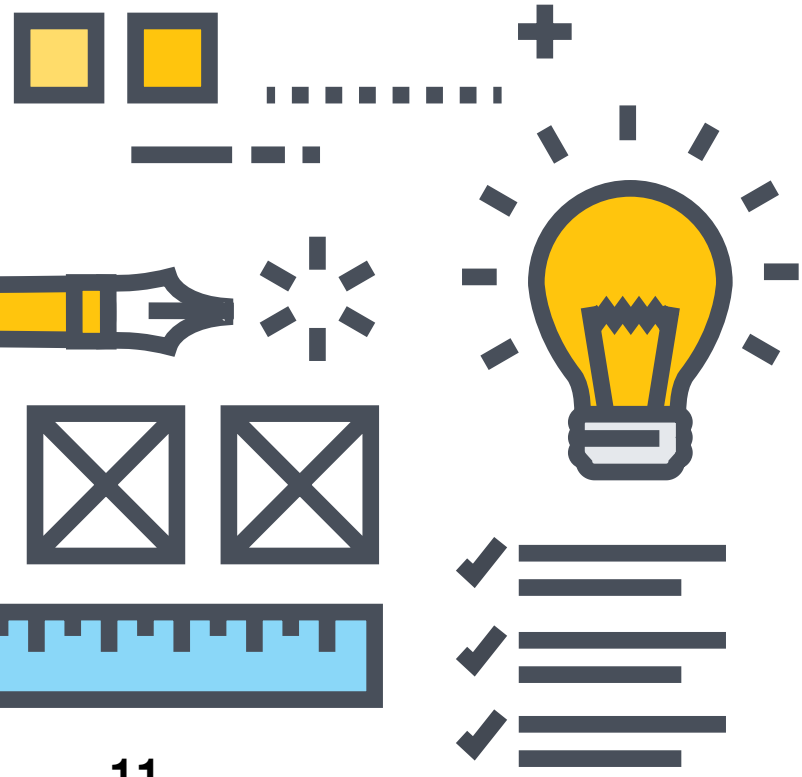


11

18

October 2017

Volume 64 | Issue 9

4 **From the Editor**

5 **From the Guest Editor**

FEATURES

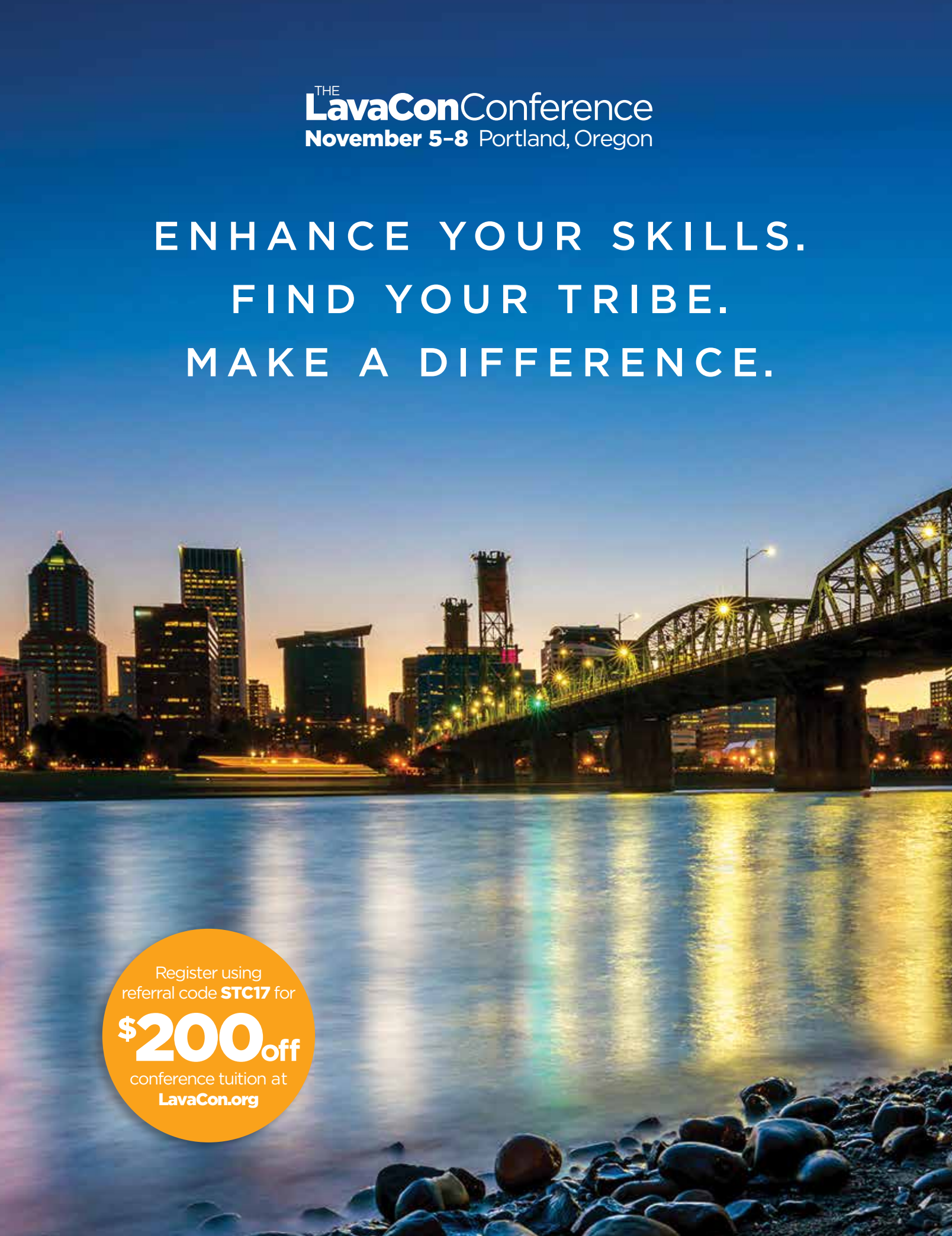
PAGE DESIGN AFTER PRINT

6 **Balancing Credibility with Responsive Design**
By Clint Lanier
Learn how to balance the elements that affect a website's credibility and trustworthiness with the elements of responsive Web design.

11 **Designing Wiki Templates for Today's Web**
Richard Rabil Jr.
The author argues that better understanding of template design and execution of wikis to suit an organization's purpose is vital; he offers advice in designing wiki templates in a mobile world.

15 **Creating Beautiful Online Content with Web Fonts**
By Ed Marsh
A discussion of the importance of presentation and using the right fonts when designing help systems.

18 **Shooting the Serif in Virtual Reality**
By Crystal Elerson and Terry Smith
The authors examine fonts and document design in virtual reality and offer technical communicators a starting place for developing best practices for designing communication in VR.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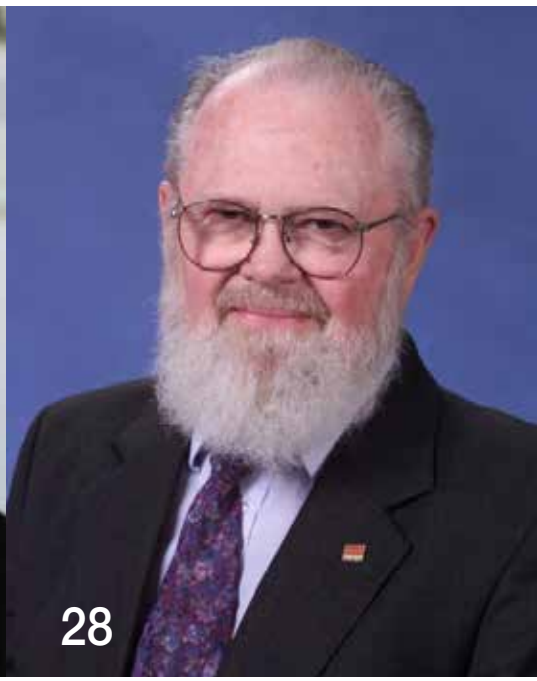

SOCIETY PAGES

22 STC's New "Women in Tech Comm SIG" Is Looking for Members
By Nicky Bleiel

23 Jay R. Gould Award Call for Nominations

23 STC Community Competitions

COLUMN

MEET THE CHANGE AGENTS
24 Andrea Volpini: The Man Who Makes Web Content Talk
By Scott Abel

DEPARTMENTS

FYI
27 Mark Your Calendar
Organization Events Across the Globe

IN MEMORIAM
28 In Memoriam: Andy Malcolm

ADVERTISERS

C2 Adobe
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11 Group Wellesley, Inc.
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C4 MadCap Software
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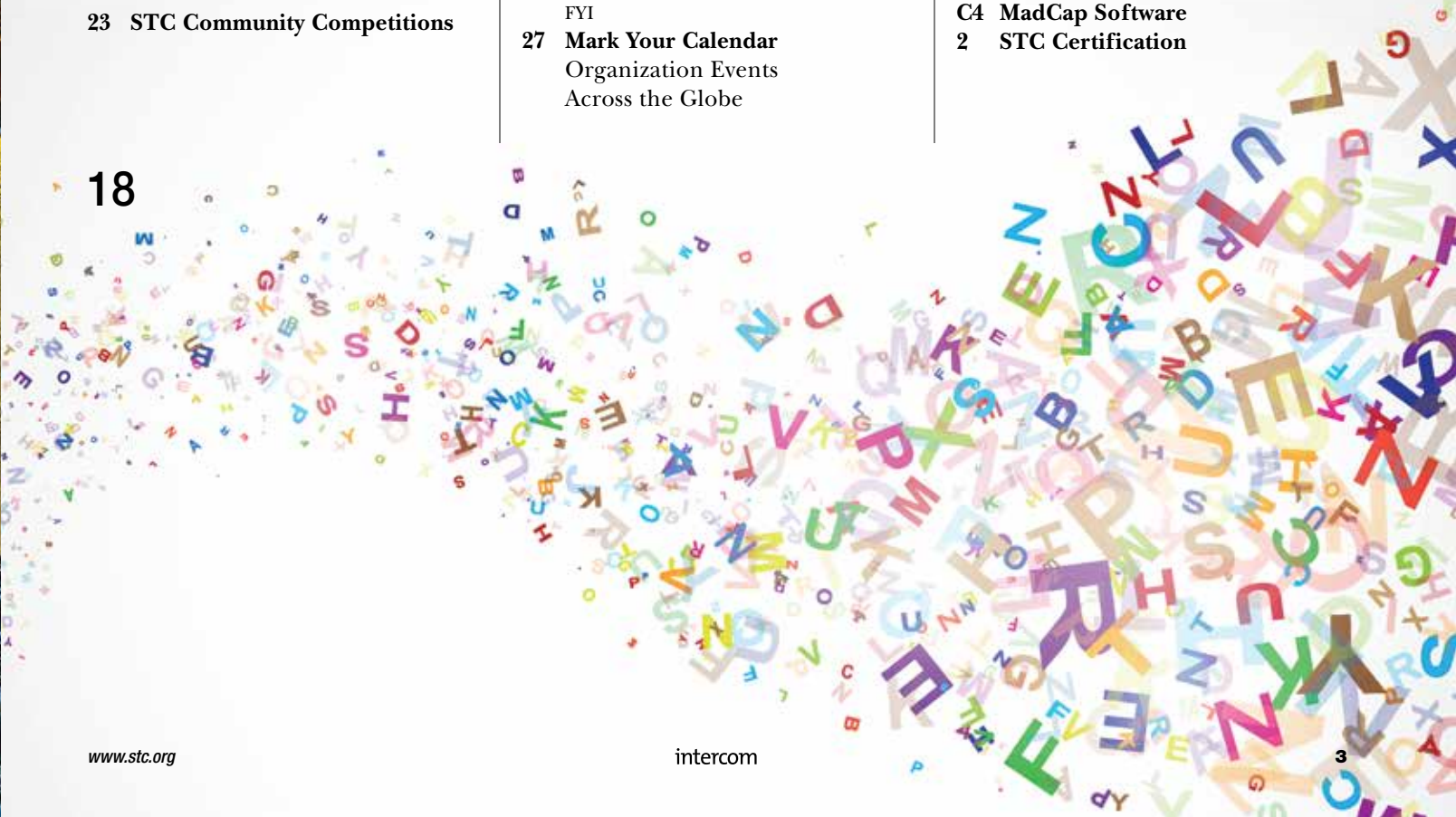

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Assistant Editor James Cameron
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SOCIETY FOR TECHNICAL COMMUNICATION
9401 Lee Highway, Suite 300
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+1(703) 522-4114 | +1(703) 522-2075 fax
Send questions and correspondence to the editor at the above address. General information about STC: stc@stc.org *or* www.stc.org.

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A Note from the Editor

WHEN MICHAEL OPSTEEGH approached me about a special issue of *Intercom* with a theme of "page design after print," I was intrigued. His plan was to focus on the perils of designing information when it comes from a variety of sources (like content management systems) and is viewed on a variety of devices. In articles on the theme, the authors provide four compelling responses to Michael's call for content; topics include: investigating the credibility of content displayed on mobile devices, designing wiki templates, help system Web fonts, and font selection in virtual reality environments.

Michael has been a Technical Writer in the software and financial services industries since 2004. He is currently a Senior Technical Writer for Eyefinity, which supports eye care professionals with industry-leading software and services, and he is a Lecturer in the technical and professional communication program at California State University, Long Beach. He is among the first in the profession to be designated as a Certified Technical Professional Communicator (CPTC), and he has previously published articles in *Intercom* and presented at past STC Summits. He most recently began working on his PhD at Texas Tech University, and his research interests include ethics, user experience, visual rhetoric, and risk communication.

It was a pleasure to work with Michael on this issue of *Intercom*, which will be my penultimate issue as editor. It is my pleasure to announce that long-time *Intercom* contributor Andrea Ames has agreed to take on the magazine's editorship is 2018, and I look forward to the topics and editorial direction she has planned for the coming year. Look for more on changes to *Intercom* in my next editorial, and as always, please email any feedback or articles ideas you may have!

—Liz Pohland
intercom@stc.org

A Note from the Guest Editor

FOR YEARS, THE PRODUCTION of technical manuals was compartmentalized. Technical writers wrote out manuals by hand or typed them on typewriters, adding specifications about how the text should be treated. An illustrator designed drawings to accompany the text. A designer wrote out specifications for the page layout. Finally, a compositor set the type, laid out the pages, and produced galleys for proofing prior to printing. The technical writer had little or no control over the final design and layout of the manual.

Then, something incredible happened. Personal computers and desktop publishing suddenly made it possible for one person to write, design, and publish a manual—at a fraction of the cost—and technical writers soon had the ability to typeset their own documents, create diagrams and drawings, and lay out pages. Technical communication classes quickly incorporated typography, page design, technical illustration, and all the rhetorical trappings visual design entails. So, too, Web design allowed technical communicators even more design flexibility than print could ever afford. The production of technical information was no longer partitioned.

Fast forward to the present day, where structured authoring systems, like DITA, and content management systems (CMSes) attempt to relieve the writer of design choices so he or she can focus on writing. And we've happily (some of us) bartered away control over design for the promise of single sourcing, reusable content, and easier content management. It seems technical communicators are returning once again to producing content rather than designing it.

As someone who is deeply interested in the visual design of information, I'm torn. I understand and agree with the arguments for structured authoring, but I lament the erosion of craft. We've spent the last 30 years training technical communicators the rhetorical importance of information design. How are we going to influence the design of our communications when CMSes take our content, reassemble it, and push it out to a variety of media, devices, and screen sizes? If we aren't able to influence the visual design of information, what have we lost? These are the questions that influenced this special issue of *Intercom*.

The theme of this issue is "page design after print" and focuses on thoughts—both practical and theoretical—that grapple with this tectonic shift in our industry. The articles selected represent the breadth of ideas proposed.

First up in this issue, Dr. Clint Lanier takes a close look at the perceived credibility of information when it's reconfigured to display on smartphones.

Next, Richard Rabil Jr. describes challenges and best practices for

designing wiki templates and offers advice on maintaining credibility and usability.

Ed Marsh continues the theme of template design in his article on designing more beautiful help systems with Web fonts.

Finally, Dr. Crystal Elerson and Terry Smith look to the near future by examining how font selection affects the user work experience within virtual reality.

While this selection of articles reflects a variety of ideas, it isn't exhaustive. I hope to see further discussion in *Intercom* on the theories and strategies of information design in this brave new world.

—Michael Opsteegh
michael.opsteegh@eyefinity.com

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Balancing Credibility with Responsive Design

By CLINT LANIER

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A WEBSITE'S CREDIBILITY—the degree to which its users find it trustworthy—is one of its most valuable assets. According to researchers, the perception of a website's trustworthiness can subsequently affect the credibility and trustworthiness of its content and authors (Karimov et al. 2011), the amount of sales or donations received from the site (Long and Chiagouri's 2006), and the perceived usefulness of both the website and its content (Corritoreet al. 2005). Ensuring the credibility of a website, then, should be one of the primary factors affecting the site's design and development, and this is especially true for sites utilizing responsive Web design.

Responsive Web Design (RWD) has become the standard for mobile-friendly websites. In fact, Google recommends it as the method of choice for designing sites to be viewed on mobile devices. There are numerous articles, studies, blog posts, and books on RWD, all of which provide the best technical methods and advice for properly applying the code for designing sites. However, there has been no attention paid to how RWD changes a website beyond manipulating it for viewing purposes. When RWD is used, the website loses information units, it loses graphics, and it changes formatting—these are not merely design differences; they are dramatic changes that potentially lead to significant differences in credibility. Designers and developers, therefore, must account for credibility when structuring the site using RWD.

This article discusses the factors that affect the credibility of traditional websites. It then briefly describes a study to find out what makes a mobile website credible. Finally, this article ends with suggestions for designers and developers for ensuring their mobile websites are as credible as their standard (meaning, desktop) version.

What Affects the Credibility of a Website?

Websites are judged as credible based on many factors, but according to researchers Flanagin and Metzger (2007), they can be nested among three different categories:

- Message credibility
- Site credibility
- Sponsor credibility

Message credibility is the perceived trustworthiness of the message itself. Users decide how willing they are to trust the message the Web page is conveying. More specifically, they focus on how valuable and accurate they think the information is. If the information is not valuable to them, there is little chance they will spend much time interacting with it. Likewise, if they see the information is inaccurate, full of errors (including things like grammatical or spelling errors), they are sure to question its credibility. Also of note in this category is the need for "human-like" factors. These are elements that are less technical and more relatable. An example is the casual language found in online writing in contrast to the more frequent professional writing style seen offline.

The credibility of the site can be attributed to the architecture of the site itself, the graphics and look of the site, and the genre in which the site fits. The first of these, the architecture, suggests that users judge items like ease of navigation, the placement of menus or information, and so forth. Much of this information has been covered extensively in usability research for Web design, so designers have a significant amount of material to draw from for help.

Needless to say, the look of the site is judged as well. However, a large pool of research in graphic design will help Web designers avoid poorly made graphics and images. According to previous studies, if a site looks professional, modern, and up-to-date, it will be judged as more credible. If the site looks old, cheap, or clumsy, it will conversely be judged as untrustworthy.

A point about the graphics must be made here before moving on. Not only should they be of high quality and professional looking, but they should also be used to help the user associate the website with familiar and trusted sources. The logo of the website's sponsoring organization (for example, the IBM logo on IBM's website) should be prominent so the user quickly associates the website with that (trusted) sponsor. Without an association between the content and a trusted organization or sponsor (through a prominent logo, for example) the user does not know whether to trust the information or not.

Lastly, with regard to site credibility, genre plays a role as well. Website visitors judge the credibility of certain website types, such as news or advice-providing websites, for being more trustworthy than others, such as e-commerce websites or personal blogs. Users trust websites with genres they think look "official." And in the same way that genres exist for paper-based documents, with their associated formatting and looks, they also exist for websites. News websites and blogs, for example, look a certain way. Users quickly judge the genre of a website and then parlay that into trust or distrust.

Finally, the credibility of the sponsor of the website—the website that owns or in other ways "sponsors" the Web page the user is viewing—contributes to the perceptions of the website's overall credibility. A 2007 study of nonprofit websites found that perceived credibility and trustworthiness was based on the familiarity and attitudes toward the various organizations. If users are familiar with the organization, the website, or the author, and if they have favorable opinions of them, they will in turn be more willing to believe that the website is credible.

Furthermore, advertisements are also seen as creating an association between the content and trust. If the website in question has advertising from trusted organizations versus untrusted organizations, it is much more likely to be credible to the users. This is surprising because we would tend to think that advertising would lower the credibility, but in fact it contributes to it.

Differences in Full and RWD Websites

The two figures below provide examples of the changes made when websites are restructured for mobile devices

Figure 1. Article used in study as viewed on a desktop computer.

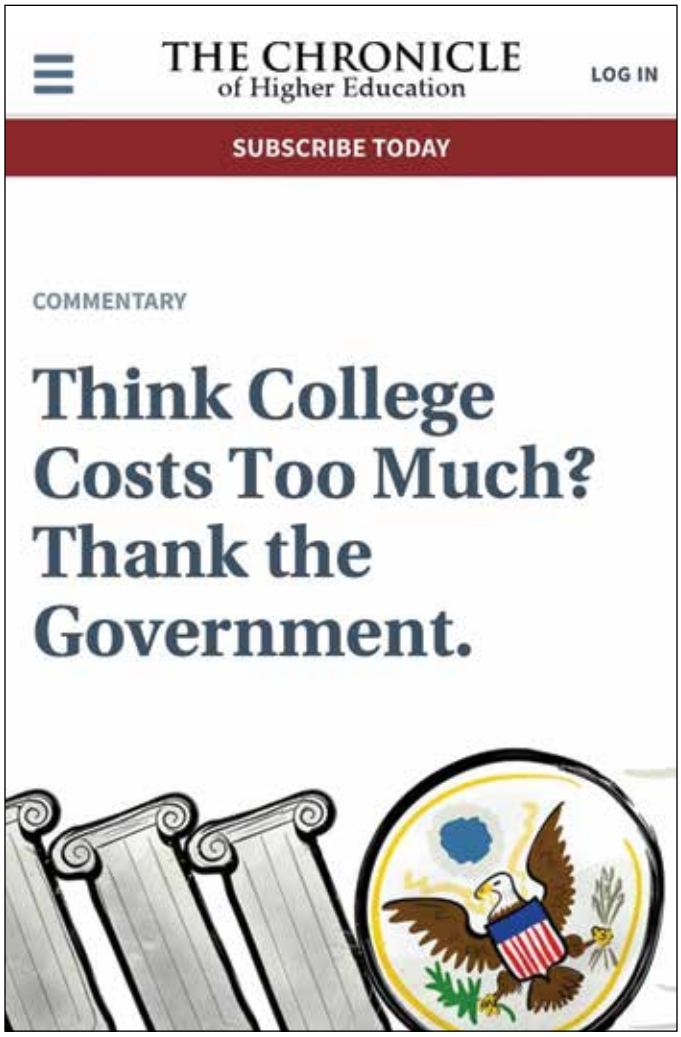

Figure 2. Article used in study as viewed on smartphone.

(using RWD), and how those changes affect the website's credibility. Figure 1 displays an article titled, "Think College Costs Too Much? Thank the Government" published on the website *Chronicle of Higher Education* and written by Arthur F. Kirk Jr., President of Saint Leo University. This is what a user sees immediately upon entering the article.

Figure 2 is the same article displayed on a mobile device.

Note the many differences between the two sites. When considering these differences in relation to the points made by Flanagin and Metzger, we see two potential areas where credibility suffers: sponsor credibility and site credibility. Simply put, the mobile version lacks certain aspects that website users need to measure the trustworthiness of a site.

A sponsor's credibility is immediately established for users by the sponsor's logo and name. In the desktop version of the article, the name of the website (and thus the logo and sponsoring organization) is prominently featured horizontally across the top of the page, accounting for as much as 10% of the height of the page. Conversely, on the mobile page, the logo (which is the same logo as the desktop site), is quite small and easily missed at the top. Instead, a user's vision is attracted to the large image below it.

Next, the mobile site is designed so that the text is made prominent in a single column. To ensure the page content takes up the maximum space, the designers chose to hide the logo and website name as soon as a user begins scrolling (see Figure 3).

Without the sponsoring organization's logo or name, users have little way to create an association between the content and a trusted source. Thus, as they look up midway through an article, they cannot tell if they even trust the organization or not. On the desktop, the sponsoring organization's logo and name also vanish, but along the left-hand column there are many advertisements, many of them for other *Chronicle of Higher Education* products or articles. The association is thus reinforced throughout the reading of the article.

Think College Costs Too Much? Thank the Government.
Brian Taylor for The Chronicle
By Arthur F. Kirk Jr. | MAY 19, 2014
I am not going to argue that a four-year college education isn't expensive. It is. I won't argue that its

Figure 3. Article displayed on the smartphone, with logo and website name missing.

The advertisements could also serve to increase the desktop version's credibility. The advertisements include calls to other *Chronicle* articles, the magazine's job bank, professional services, and other reputable promotions. There are no advertisements for organizations, or for products or services that would create an appearance of untrustworthiness.

The next aspect is the credibility of the site itself. In previous studies, researchers found that a site's genre affected the perceived credibility of that site. The website of a news organization is more trusted, for example, than a website for an e-commerce or blog site. The genre of the desktop version is easily identified as a magazine or newspaper website. However, because of the necessity to format the mobile site so that it is a single column with the text made prominent, there is no way to identify the type of genre the mobile site belongs to. Thus, the perceived level of credibility is either lowered or simply not raised as a result.

Lastly, the absence of graphics in the RWD website would also be a factor in the lowered credibility. As pointed out, there is no prominent logo on the RWD site, nor are there any advertisements with associated graphics. In fact, on the RWD site, the only graphic is the large header image used in both the desktop-based site and the RWD site. The graphic (the seal of the United States leaning against three columns causing them to fall) could be symbolic of the message of the article (stating that the U.S. Government is responsible for the high cost of college), but it is not directly or easily associated. Thus, it might as well not even be in the RWD site, as the image is a bit meaningless.

Considerations for Improving the Credibility of RWD Websites

Applying past research concerning the credibility of desktop-based sites to RWD design gives website developers and designers a wealth of advice for restricting their desktop-based sites. The most obvious advice might be to ensure either site is usable, functional, and lacking grammatical or technical errors. To their credit, most designers ensure this anyway for their desktop and mobile versions.

For RWD exclusively, however, designers should consider the following: First, ensure that the sponsoring organization's logo is placed prominently at the top of the page. Make it large and easily seen and identifiable so that an association between the page and the sponsor can be quickly made.

Next, allow the logo to remain in view, so that the user can refer to it throughout the content. If you wish to reduce the logo's prominence to optimize the space used for text, do so, but at least make the logo smaller and allow it to remain in view, not disappear completely. Again, users may need to refer to the logo halfway through the content to reassure themselves of the association. If the logo dissappears from view, this association may not be as strong or obvious.

If possible, ensure the author's name, title, and perhaps even image is placed before the content. This establishes a relationship between the information and the authority that created it. If there is not a single author (in the case of a user documentation group), then perhaps credit the group that created it instead (for example, "Written by the Software Installation Group"). This elevates the credibility even more, because anonymous information is considered untrustworthy.

Be calculating about the graphics you use in the RWD site. These should include the logo of the sponsoring organization, an image of the article's author, and perhaps an image that directly associates with the content of the page. Further, even though the site should be formatted to optimize the content, typically by reducing the content area to a single long column, peripheral information should be included. Advertisements should also be included in the main content column to help create associations to other, credible organizations.

In conclusion, RWD is the preferred way to create mobile online content, but doing so may focus too heavily on usability at the expense of credibility. To ensure that the content is trusted, designers need to understand the aspects that make websites credible. Further, designers need to implement these guidelines in the site redesigned for mobile devices.

CLINTON R. (CLINT) LANIER, PhD, *has been a professional in technical communication since 2000 when he received an MA in technical communication from New Mexico State University. From there he worked as a software engineer/technical writer for IBM in Tucson, AZ, and then as a technical editor for the Army Research Laboratory at White Sands, NM. Clint is now an Assistant Professor of Rhetoric and Professional Communication at New Mexico State University. He teaches classes and conducts research in topics including digital and new media, technical communication theory, and document design. He is also an active industry consultant.*

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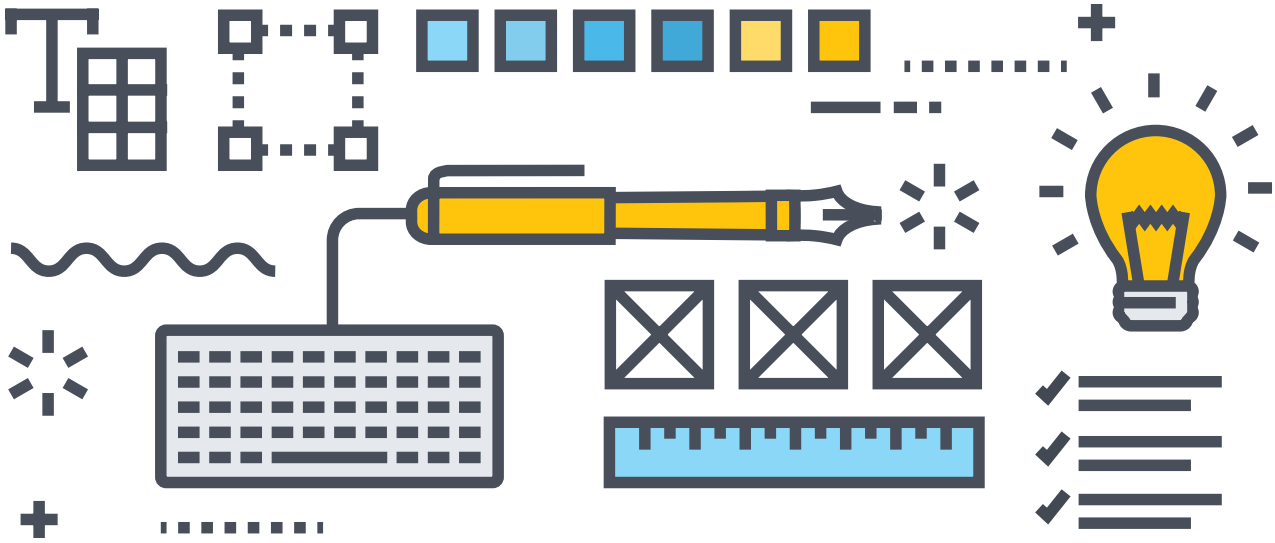
Designing Wiki Templates for Today's Web



By RICHARD RABIL JR. | *STC Member*

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AS TECHNICAL COMMUNICATORS, we save time for ourselves and our colleagues by designing document templates in which to capture valuable organizational knowledge. We know how to construct cover pages, page breaks, placeholders, and instructions. We know how to manage the formatting so that (in theory) all another user has to do is open the template and focus on adding beautiful content.

The design of such templates has traditionally assumed a print medium. How do our template design strategies change as more of our documentation moves to the Web? What techniques should we consider, knowing that our content may need to adapt to various screen sizes?

On the one hand, some special design considerations do seem to emerge: we can't pretend that what works in print works just as well on the Web and mobile screens. On the other hand, many of the design principles that we have always depended on remain useful and relevant.

In this article, I identify some of the unique challenges faced by designers of templates in a particular type of Web-based system common among technology organizations: wikis. I then turn to practical suggestions for designing wiki templates while keeping mobile responsiveness in mind.

Challenges with Wiki Templates

The oldest and most complicated problems with print templates will continue to exist with wiki templates. For example, receiving low-quality input from contributors is a problem that can be mitigated but never completely avoided, regardless of the medium. But there are some unique challenges with wiki templates due to their hypertextual nature. These challenges inform our template design choices.

User Behavior on the Web

User behavior on the Web differs in important ways from user behavior in print documents. In his book *Don't Make Me Think*, Web usability expert Steve Krug makes the critical point that, rather than consuming Web pages in their entirety, users scan for terms and interface elements that match their interest (22). Patrick Lynch and Sarah Horton, authors of *The Web Style Guide*, underscore the fact that hypertext allows users to search for and access Web pages "without preamble" (18). In other words, since users can arrive at a wiki page in multiple ways (rather than through a linear sequence more common in print documents), wiki pages need to be "freestanding": they must provide enough context for users about where they are and what they are reading without being long and verbose.

Fluid Screens

Well before mobile devices became mainstream, scholars were pointing out how hypertext allows authors and readers to break free of the rigidity of print documents. For example, in his article "The Shape of Text to Come: The Texture of Print on Screens," Stephen Bernhardt marveled at the customizable nature of hypertexts, remarking how readers can hide "the display of rules, spaces, returns, mark-up language, stylebars, borders, and menus" if they so choose (246). Today, responsive design essentially performs this action automatically by detecting the dimensions of a user's computing device.

As experienced consumers of smartphones, it is difficult for us to appreciate just how dramatic a departure this is from the fixed width paradigm of print. In practical terms, it means we can never be quite sure of the size of a user's screen. Even if we make reasonable generalizations about how our primary audience is more likely to use a laptop than a smartphone, we may later need to accommodate mobile displays due to some external force, such as a shift in corporate strategy or a new technological innovation.

Reduced Control of Global Elements

With print document templates, we have considerable control over a document's components. Even when we must adhere to a strict corporate style guide, we at least have the administrative privileges to modify every part of the document to match it. On a wiki, we may have little to no control over major portions of the website, most notably the "theme" or outer elements. In such cases, the header, footer, homepage, color scheme, and CSS are configured by someone else, forcing us to work within a larger framework whose inner workings we cannot access or modify.

Design Strategies for Wiki Templates

Let's turn now to specific design strategies that may help with navigating these challenges. Of course, "design strategies" is an extremely broad topic. To keep the scope manageable, I focus on Atlassian Confluence as the wiki tool from which to draw examples (although my suggestions are generic enough to apply to other wiki tools). Additionally, I try to avoid restating Web writing and design best practices, and concentrate instead on categories that are most applicable to wiki template designers.

Wiki Branding

While you may have some control over the design of your individual wiki space, resist the urge to depart too dramatically from the global brand and color scheme established in the wider wiki instance. Major departures can lead to jarring inconsistencies that cause users to question the credibility of your content. Either design your wiki page templates to stay in line with the global brand (for example, stick with the same colors and font types), or try to work with the wiki administrator to implement a change at the global level.

Wiki Macros

One of the most powerful tools at your disposal when designing wiki templates is the use of macros. In Confluence, a macro is a short piece of code that you insert into a page to perform a common function such as formatting a note or displaying a table of contents. Some common out-of-box Confluence macros that I have found especially useful for technical writing include the Table of Contents macro, the Page Include macro, and the Page Tree macro. Familiarize yourself with the macros that are packaged with your wiki to see how you can leverage them in your templates.

You might also be in a position to investigate third-party macros or plugins that give you a finer degree of control

over the design of your wiki. For example, the Refined Theme plugin for Confluence provides control over the global tab structure, CSS, and color scheme. The Scroll Viewport plugin allows you to expose sections of your wiki to a public audience, and it comes pre-built with responsive design features so that your content adapts dynamically to smaller screens.

Use caution, though. Third-party macros and plugins can be costly and complex, and they may one day get cut from the budget if your organization downsizes or is acquired. That will cause significant maintenance problems if you develop a dependency on them.

This article assumes that you don't have the resources to purchase third-party tools for your wiki and focuses on design ideas that work with out-of-box functionality.

Page Structure

As with print document templates, you need to do your homework to determine the information architecture of your wiki templates—a task that is familiar to many technical communicators. Still, it's important here to reiterate the principle about designing your wiki templates to be as freestanding as possible. One way to do this is to include a standard overview section (see Figure 1) in all of your templates and pair this section with instructions and examples about how to set the context.

Template Instructions

Speaking of instructions, provide your contributors with solid information on how to find and implement the templates. Write a short guide on your wiki that describes what templates are available, how to find them, and how best to implement them.

A critical part of this approach is embedding instructional text in the page templates themselves. This also happens to be one of the hardest parts. You want instructional text that is short and unintimidating, while also clear and specific enough to guide users in writing high-quality content. Use concise commands and add links to polished sample pages and examples. Also, include some writing best practices in your guide and offer weekly office hours and consultations with contributors.

Page Titles

Wiki page titles are often the first thing a user will see in search results before they decide whether a page is applicable to them. As part of your instructions, explain to contributors how to craft a title that follows a consistent

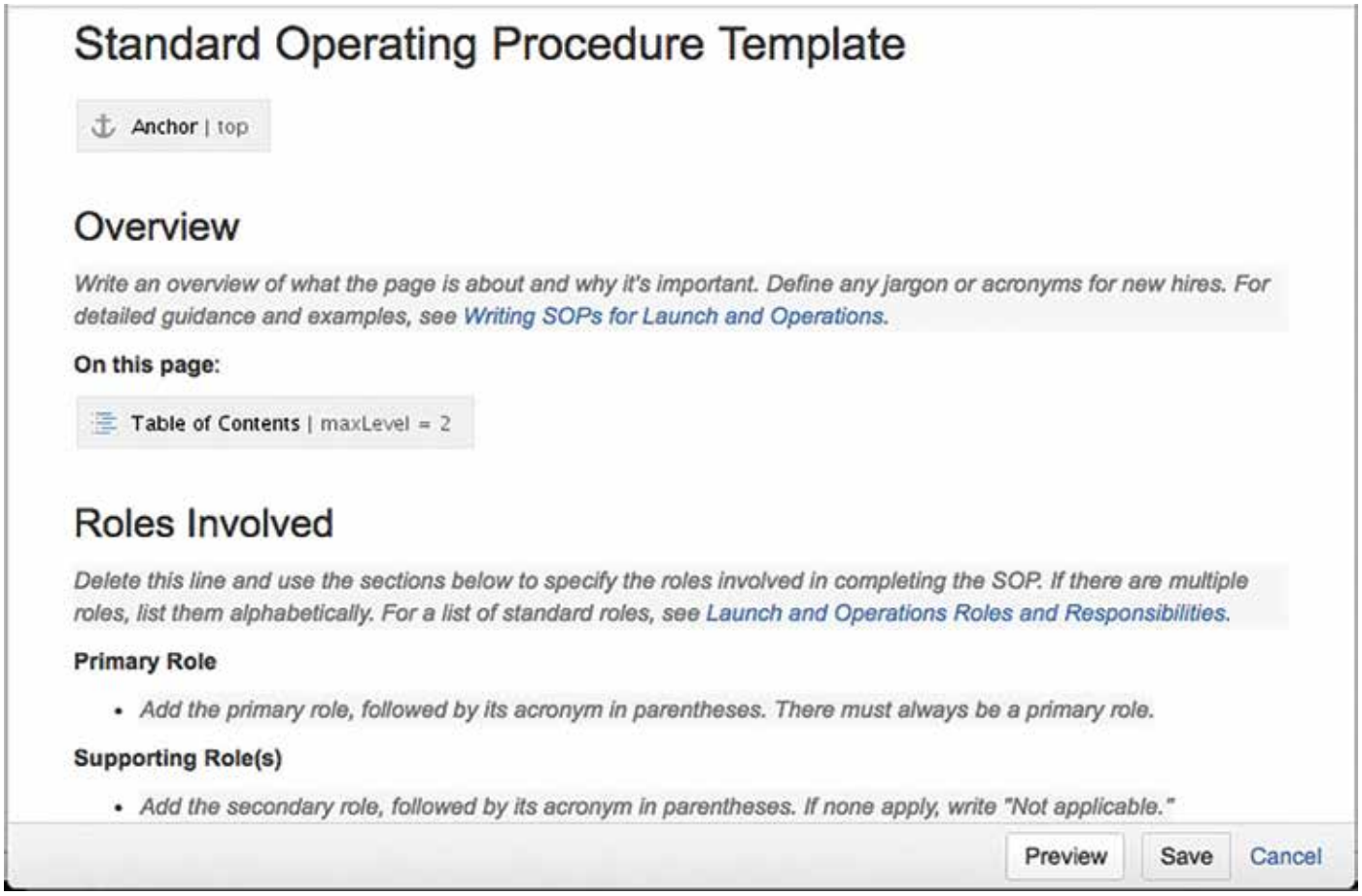
Standard Operating Procedure Template
Anchor | top
Overview
Write an overview of what the page is about and why it's important. Define any jargon or acronyms for new hires. For detailed guidance and examples, see Writing SOPs for Launch and Operations.
On this page:
Table of Contents | maxLevel = 2
Roles Involved
Delete this line and use the sections below to specify the roles involved in completing the SOP. If there are multiple roles, list them alphabetically. For a list of standard roles, see Launch and Operations Roles and Responsibilities.
Primary Role
Add the primary role, followed by its acronym in parentheses. There must always be a primary role.
Supporting Role(s)
Add the secondary role, followed by its acronym in parentheses. If none apply, write "Not applicable."
Preview
Save
Cancel

Figure 1. Example wiki template for a standard operating procedure. Note the standard overview section, instructions with links to more detailed information, and single column layout. The simpler the design, the more responsive it is likely to be.

pattern and yet differentiates itself from other pages—and how to test the page in the search engine. For example, how does the page appear in the auto-suggestion list? Does it display alongside pages with a similar or identical title, and if so, how can the user distinguish it more clearly?

Page Layout

Confluence makes it delightfully simple to vary the page layout for your wiki pages. The risk is that multiple columns can get squished together on small screens unless you have a special plugin or a mobile app version of your wiki that allows the columns to stack gracefully for smaller screens. I suggest using a single column for all of your wiki templates, left justifying as much of your content as possible, and frequently resizing your browser to test how the content flows.

Page Headings

Long headings (of five to seven words or more) will increase page length on mobile devices due to wrapping, so be sure to mention that in your template instructions and examples. Moreover, you may want to insert a mini table of contents to your wiki templates. As with page columns, the question then becomes how the table will look when the screen size shrinks. The simplest and safest approach is to left justify the table of contents on its own paragraph, but I encourage you to experiment until you arrive at a solution you can live with.

Tables

Limit yourself to two or three columns if you can, since four or more columns will not resize well on mobile devices. Consider breaking up a large table into smaller ones; or as a mobile-friendly alternative use a combination of subheadings and tucked, inline labels to break the content into scannable, standardized chunks.

Conclusion

There is, of course, plenty more to be said on this subject. Metadata, images, videos, hyperlinks—these and many other dimensions of the document design process could be discussed as well. I also think technical communicators would benefit from an in-depth evaluation of approaches such as minimalism and mobile-first design as possible answers to the problems inherent in wiki template design. But you have to start somewhere, and a good first step is to strengthen your understanding of the nature of wiki templates, along with ideas on how best to employ them.

RICHARD RABIL JR. *is a Principal Technical Writer at Oracle. He has over 10 years of technical communication experience and holds a master's degree in technical communication and rhetoric from Texas Tech University. You can follow him on Twitter at* @rrabil *or check out his blog at* richard.rabil.com.

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Creating Beautiful Online Content with Web Fonts

By ED MARSH | *STC Senior Member*

shutterstock/Valentin Drull

ARE YOU TIRED of using standard fonts such as Georgia, Tahoma, Verdana, and (sigh…) Arial over and over in your help projects? Please say yes.

A benefit of moving from print to online content is that you have the flexibility of creative design without the expense of reproduction. There are no limitations on colors, margins, fonts, or page counts. Still, many print design principles apply, and good design matters—even more so in the online world. Limit the number of fonts you use to no more than three—a serif, a sans-serif, and if necessary, a monospace font for code.

The key to online presentation is cascading style sheets (CSS). Since its introduction in 1996, CSS has supported using different fonts. At the time, this typically meant system fonts that shipped with the operating system (e.g., Windows, macOS, Linux). Font selection was limited to system fonts due to bandwidth constraints, browser support, and typographers' unwillingness to allow essentially endless copying of their work. It wasn't until the 2000s that true Web font standards were developed.

Back in 2010, I wrote a blog post about how to implement Web fonts in MadCap Flare (my most popular blog post to date). Since then, new technologies have sprouted, bandwidth is almost limitless, mobile has taken over, and people expect beautiful experiences no matter where they are. When researching this story, I was surprised by how much has changed.

The good news is that it's easier than ever to create a unique look for your online content. Web font technology is not proprietary (although many fonts require licensing). You can use this technology in any help system and any authoring tool.

In 2017, all major browsers—on both desktop and mobile—support using the CSS @font-face attribute. Most modern help authoring tools (HATs) use CSS to style WebHelp and HTML output, so you can easily implement fonts to change your help system's look and feel. With some tools, you can even use your CSS to style your print output, giving your output a professional, consistent presentation.

There are many great places to find Web fonts. Google has its own font API (*fonts.google.com*), and Adobe offers Typekit (*typekit.com*), which is part of its Creative Cloud subscription. (Unfortunately, Typekit isn't natively supported within the Adobe Tech Comm Suite at this time.) If you prefer a nonproprietary option, Font Squirrel (*fontsquirrel.com*) has been around since my original post seven years ago, and has hundreds of free fonts.

Check with your tech, marketing, or branding teams to see if they have some sort of standard CSS file, or a framework like Bootstrap to start from. This also gives you the opportunity to break down a silo and create a relationship with those teams.

Web Font Considerations

There's not a lot of overhead in terms of effort or disk space. Font references barely affect the page load time for your desktop users, although you should be careful to use only the fonts you need. Your mobile users will thank you for limiting the amount of data you make them download.

If your output is distributed offline, such as WebHelp, you can choose to install fonts locally, or link to the font files on your company's server. However, consider that your clients may not allow changes to system folders, such as the Windows Fonts folder (c:\windows\fonts), or allow references to external files such as CSS. You'll also have to talk to your application team to ensure everything will be installed correctly.

For these reasons, it's always good to specify font fallbacks—a listing of alternative fonts in case the preferred font isn't available. If you look at a CSS file, you'll notice the @font-face declaration usually has several fonts listed to accommodate the wide range of operating systems and platforms. You'll almost always find the serif, monospace, and sans-serif attributes are also used. For example:

```
font-face: 'myriad web', arial, verdana,
helvetica, helv, sans-serif;
```

Using Fonts

There are thousands of fonts out there, but not all font creators support font embedding, so be sure to read any license agreement before using them in your projects.

If your company will allow outside links, then implementing fonts are as simple as adding a CSS reference in the master pages/templates of your output, and updating your CSS files to refer to the fonts.

If your company is hesitant to allow links to Google or Adobe, you can also save and host freely available font files on your company's Web server and use these fonts in your HTML/WebHelp projects. If you ship help to customers, such as offline WebHelp or CHM, you can install the fonts on your users' computers as part of your application's installation.

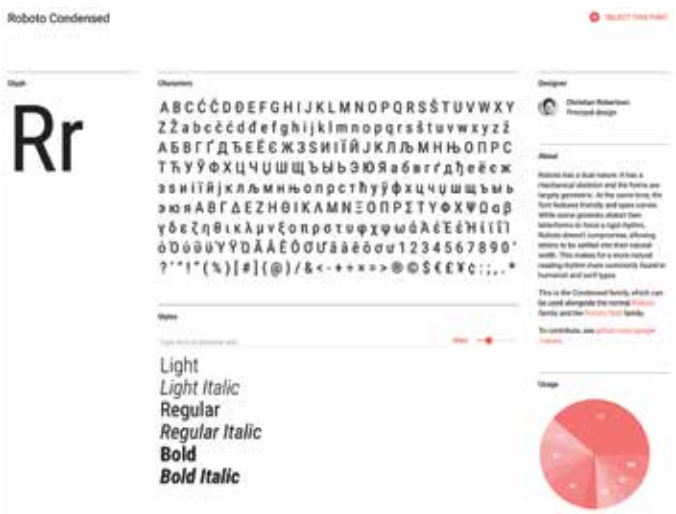

Figure 1. The Google Fonts site lets you preview and test fonts.

Using Google Fonts

Since there are fewer restrictions than Adobe's Typekit, let's look at how to use Google Fonts in a help project. Google's site is an elegant and beautiful way to preview, choose, and use Web fonts.

You can filter by font styles, font families, and classification by serif, sans-serif, etc. Once you select a font, you can choose what weights to use and implement.

On the Customize tab, you can choose the font weights to include. The interface also indicates the effect on website loading times. Selecting all the font weights and styles highly impacts download times, as shown in Figure 3, so consider your mobile users by choosing only the weights you need.

When you're ready to go, click the Embed tab, and copy the HTML that Google provides, as shown in Figure 4. Place the <link> reference in the <head> section of your HAT's template file.

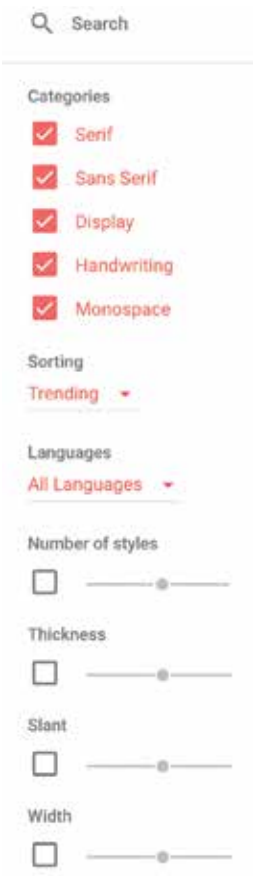

Figure 2. Google Fonts enables you to find fonts quickly based on such attributes such as style and weight.

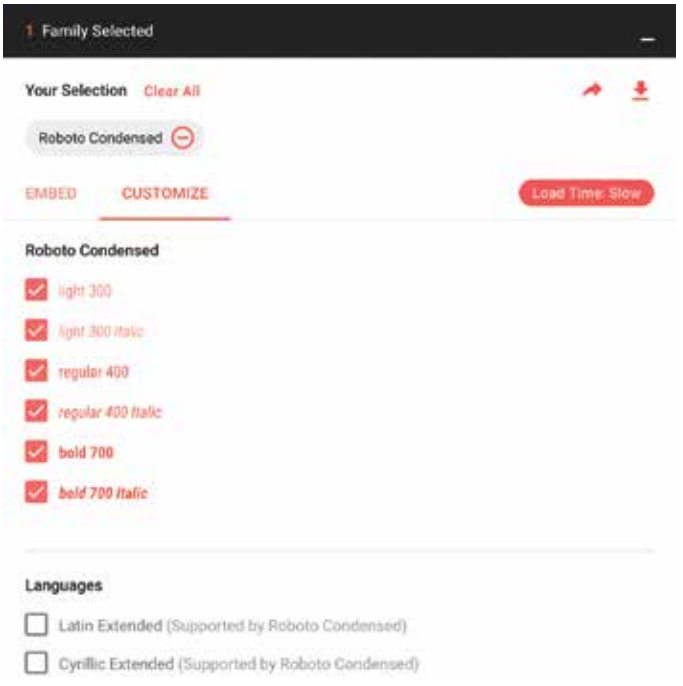

Figure 3. Google Fonts shows the impact of your font choices on download times.

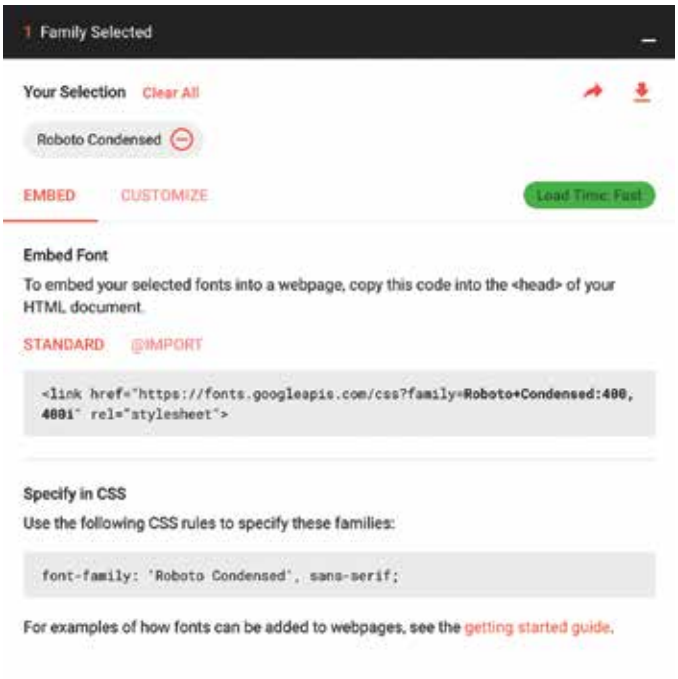

Figure 4. Google produces two snippets of code: one to paste into your template's <head> tag and one to paste into your CSS file.

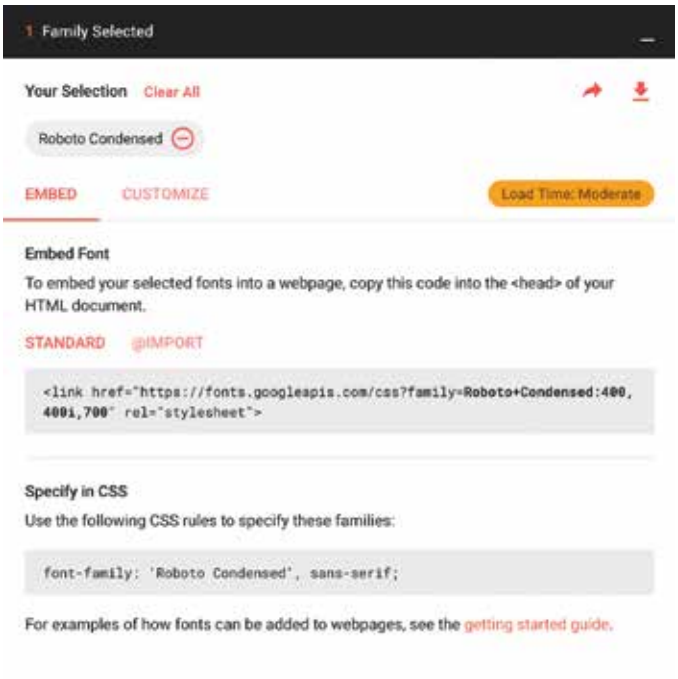

Figure 5. Click the icon on the top right to download a zip file of the fonts.

Using Fonts Offline

If you decide to use fonts locally rather than relying on Google to serve them, you can download the fonts by clicking the icon on the top-right, as shown in Figure 5.

After you download and unzip the fonts, keep it simple and place the fonts in a folder directly below your HAT's main stylesheets folder. This will also make it easier for your developers to install as part of your software distribution.

Google Fonts gives you the code to copy and paste into your master stylesheet and template files. For offline use, you'll need to specify the path to your fonts folder, instead of a URL. Your HAT may also require you to add these CSS files to your project.

In your help project's master CSS file, reference the font-family you want. For example, to set Roboto Condensed as the default font on your pages:

```
body {
font-family: 'Roboto Condensed', Georgia,
sans-serif;
}
```

Note that font names that contain spaces must be enclosed in single, not double, quotation marks.

DITA

If you author in DITA, you can specify a CSS file to use by setting the **args.css** parameter in your build file. If you're adventurous, you could edit the XSLT that generates your output to include the reference to the CSS file.

Conclusion

No matter how good your content is, presentation matters. By taking control of your online stylesheets, you can make your content easier to read and more engaging for your users. Happy fonting!

ED MARSH *is an information architect and eLearning author at Goldman Sachs in Jersey City, NJ. He is the creator and host of the* Content Content *podcast (*http://edmarsh.com/podcast*) and the* Content Content *news aggregator (*http://contentcontent.info*), both geared toward technical communication professionals.*

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Shooting the Serif in Virtual Reality

By CRYSTAL ELERSON | *STC Member* and
TERRY SMITH | *STC Student Member*

shutterstock/ImageFlow

IN THE LAST FEW DECADES, personal computers, personal printers, and Web 2.0 have changed the speed and methods we use to distribute information. As bulky CRT computer monitors have evolved into high-definition flat screen monitors, mobile phones have become touch screen devices, and computer tablets have become common devices, the methods audiences use to consume information have dramatically changed. Our understanding of best practices for document design in these new display systems is lagging. In the near future, we will need to have best practice guidelines for document design beyond paper in areas such as virtual reality (VR). Without best practice guidelines, early information dissemination using VR is problematic because users have not yet been trained for what to expect and where to look—they are relying on older, established reading habits to use these new forms on technology. With any piece of technical communication, being able to understand the information given is the most important factor an audience uses to judge material.

Our Current Knowledge of Type

Much research already exists about the legibility of typefaces in different media. On paper, serif fonts produce the best results for reading because we read, or skim, by recognizing the shapes of words. In print media, the feet on the serif fonts help maintain the shapes of words. However, early CRT computer monitors made reading serif fonts more difficult because the technology was unable to render the serifs clearly, making the shapes of the words more difficult to distinguish. Sans-serif fonts quickly became the type of choice for computer writing and other low-resolution technology, such as overhead projectors. Despite the modern improvements in technology that allow fonts with serifs to be rendered clearly on screens, the trend has continued toward the use of sans-serif fonts.

Some evidence suggests that people who learned to read on computers developed the ability to read sans-serif fonts almost as quickly as serif fonts (Arditi and Cho 2005); however, now that the rendering technology has improved, we need new research to test whether those same people would read faster if given text on-screen regularly in serif fonts.

At present, we have been unable to find in-depth research on fonts or document design that examines VR. Because these technologies are becoming more accessible to the public, we began to consider how technical communicators would use these new technologies and how to discover, define, and teach a set of best practices to our students to prepare them for the coming technology changes that will occur during their careers.

Our Understanding of Type in VR

In VR, technical communicators may have more control over directing audience attention because VR blocks out environmental distractions by limiting them from view. As we evolve toward more interactive documents, technical writers who work with document design will need to consider leading the audience in new ways. For example, currently, document designers use features such as color, rule lines, text boxes, images, font, display size, organization, and position to design their documents. In VR, document designers will need to add new considerations such as time, layering, and additional context because users can move through documents in a virtual environment.

One example of this concept of moving through a document in a virtual environment comes from a VR comic book called *Nanite Fulcrum* where the creators wrote and developed a virtual comic book (which uses a comic book style font). In the graphic novel, the audience reads as though reading a normal comic book until the audience reaches a panel outlined in blue. The audience can grasp the blue panel and step inside, as if stepping inside the scene. Inside the panel, the audience sees the formerly flat comic book panel as a VR scene. In one panel, the creators hid a simple game. This method of reading was immersive because it had many of the qualities of a video, while still being interactive for the user. If these concepts were applied to instructional writing or other forms of document design, gaining and controlling reader attention could become much easier.

Font choice plays an important role in document design because low-context readers rely solely on the text provided for the information they need. Text, by itself, lacks media richness or media naturalness information (Daft and Lengel 1986; Kock 2005). High-context readers who take in information from all parts of document design, are privy to additional contextual factors, yet still benefit from document design that uses the appropriate font for the design. Low-context readers, however, will have a much higher reading comprehension challenge that depends more on the textual information in the document. To best serve both high- and low-context audiences and overcome the limitations of poor media richness and naturalness, technical communications must design their documents with ease of reading and absorbing information in mind. One valuable area that this article examines is the role of serif and sans-serif fonts in document design beyond print media, with specific focus on VR.

With the idea that technical communicators will soon need to design content for VR, we conducted informal research to look at VR programs for readability. For the preliminary research, we asked eight users of varying age groups and computer skill levels to use an Oculus Rift and comment on the Oculus Touch training program called First Contact and Deskverse.

Examination of First Contact Training

We asked users to interact with the Oculus Touch training program First Contact because training is a large part of technical communication. In this program, the training begins with black text on a white screen in a sans-serif font.

Figure 1. First Contact is a training program that teaches users how to use the Oculus Touch. Training occurs within VR and requires users to interact with virtual objects.

The environment is a simple one, which allows the user to focus on the text. When the user looks around the VR "room," the user sees only white with gridlines extending in all directions. This virtual environment reminded the users of a holodeck on *Star Trek: The Next Generation*. They commented that the text was easy to read but a little out of focus. After the initial text-only training, the program moves the user into a well-developed environment and uses icons to represent speech from a virtual robot that trains the user. Of the programs the users used, First Contact was the favorite because of the variety of training available and the similarity of the of the training robot in the program to the pop culture success film, *Wall-E*.

Examination of Deskverse

We asked users to interact with Deskverse because it's a productivity application that allows users to view their standard desktop through the Oculus. This program is one of the few currently available that allows users to work in their usual desktop environment on documents in their word processing or design programs. At first, this idea seemed like an excellent way to block out other environmental distractions; however, the drawbacks to using Deskverse (or a similar product) in the current form come directly from readability and these problems outweighed the benefits of reduced distractions by introducing new problems. The users commented that sans-serif fonts were difficult to read but that serif fonts were even more difficult. In all cases, the users complained of eye fatigue in 15 minutes or less of use. They noted that the text was just out of focus enough to cause headaches, and each user said that they would not use VR in its current form for everyday work such as data entry, report writing, email communication, text programs, or tracking data of any kind.

Examination of VR in Meetings

Crystal Elerson tried using the Oculus for an online meeting using Zoom through Deskverse. During this meeting, different participants shared screens from their usual computers or mobile phones through Zoom, and

Figure 3. Deskverse enables users to interact with their standard desktop through the oculus, but the effect caused readability problems.

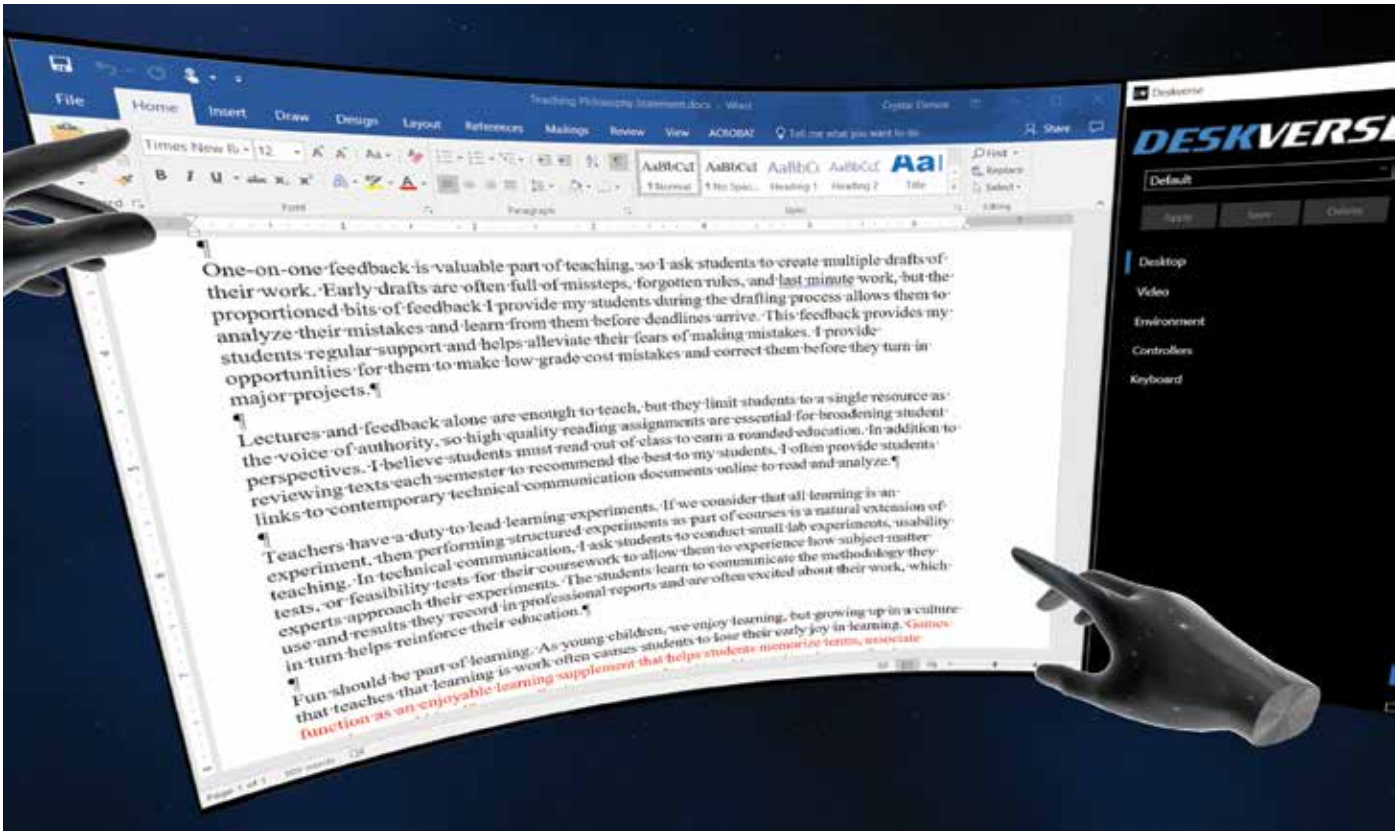
File
Home
Insert
Draw
Design
Layout
References
Mailings
Review
View
ACROBAT
DESKVERSE
Default
Desktop
Video
Environment
Controllers
Keyboard
One-on-one feedback is valuable part of teaching, so I ask students to create multiple drafts of their work. Early drafts are often full of missteps, forgotten rules, and last minute work, but the proportioned bits of feedback I provide my students during the drafting process allows them to analyze their mistakes and learn from them before deadlines arrive. This feedback provides my students regular support and helps alleviate their fears of making mistakes. I provide opportunities for them to make low-grade cost mistakes and correct them before they turn in major projects.
Lectures and feedback alone are enough to teach, but they limit students to a single resource as the voice of authority, so high quality reading assignments are essential for broadening student perspectives. I believe students must read out of class to earn a rounded education. In addition to reviewing texts each semester to recommend the best to my students, I often provide students links to contemporary technical communication documents online to read and analyze.
Teachers have a duty to lead learning experiments. If we consider that all learning is an experiment, then performing structured experiments as part of courses is a natural extension of teaching. In technical communication, I ask students to conduct small lab experiments, usability tests, or feasibility tests for their coursework to allow them to experience how subject matter experts approach their experiments. The students learn to communicate the methodology they use and results they record in professional reports and are often excited about their work, which in turn helps reinforce their education.
Fun should be part of learning. As young children, we enjoy learning, but growing up in a culture that teaches that learning is work often causes students to lose their early joy in learning. Games function as an enjoyable learning supplement that helps students memorize terms, associate

Figure 2. The text displayed within First Contact is slightly out of focus. The soft edges make the type difficult to read.

Elerson took notes in Microsoft Word. The meeting lasted for one hour, which was longer than the previous test with Deskverse. The results were the same. By the end of the meeting, Elerson suffered from eye fatigue, a headache, and during the meeting had to remove the headset multiple times to check her laptop screen to make sure she had read the text correctly. Regardless of the zoom level or Oculus lens focus, reading in VR felt like reading on an old CRT monitor. Overall, trying to focus on the more difficult-to-read text proved to be distracting.

Conclusions

At the end of the preliminary research, we concluded that further document design testing is necessary for VR because the current methods are counter-productive. The preliminary research was informal and relatively unstructured, so the results need to be reproduced under more guided testing conditions. However, in the interim, technical communication document designers who wish to prepare for VR could use these guidelines as a starting place for developing best practices:

- When text is necessary in VR, use a sans-serif font.
- When possible, use icons or graphics to communicate information.
- Users respond best to interactive tutorials, so design the document for interaction.

CRYSTAL ELERSON, PhD, (Elerson@unt.edu) *has been teaching technical communication since 2003 at the university level. Elerson works as a lecturer in the Department of Technical Communication at the University of North Texas. Elerson's research focuses on writing style, reading faces, and virtual reality.*

TERRY SMITH (Terry.Smith@ttu.edu) *is a graduate student at Texas Tech University. He has been teaching at the university level since 2002 and teaching technical communication since 2007. Smith will serve as a research assistant for applied research into the topic of this article.*

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STC's New "Women in Tech Comm" SIG Is Looking for Members

BY NICKY BLEIEL | *STC-WTC SIG Manager*

STC HAS A NEW Special Interest Group (SIG) this year, Women in Tech Comm. All 2018 STC members are invited to join this new community.

Why do we need a Women in Tech Comm SIG? The SIG's purpose is to provide a place where women in the profession (or interested in the profession) can:

- Identify and share mentorship and business opportunities;
- Advocate for the professional development of women at all stages of their careers;
- Discuss current events pertaining to women in technology and technical communication;
- Support career advancement and leadership roles for women in tech comm; and
- Share STC volunteer opportunities.

The STC-WTC SIG is open to everyone, not just women! In order to ensure that a broad range opportunities, ideas, and opinions are shared, all genders may join. In fact, the distinguished group of moderators is a diverse group: Pam Brewer, Allie Proff, Julie Waxgiser, Linda Oestreich, Alan Houser, and Matt Sullivan.

The STC-WTC SIG programs and activities will include:

- An email discussion list and website.
- A monthly virtual meeting via GoToMeeting. Meetings will alternate between formal presentations by speakers with less formal meetings that are discussions around specific topics/current events.
- Contributions to the *STC Notebook* blog, STC's *Intercom* magazine, and the TC Body of Knowledge

Adobe is generously sponsoring the first 300 SIG members for free, so the sooner you join or renew your STC membership, the more likely you are to get one of the free STC-WTC SIG memberships. STC membership info can be found online at *https://www.stc.org/membership/*. The complete list of STC Communities is online at *https://www.stc.org/communities/*. I hope you join us in the conversation!

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STC Community Competitions

EACH YEAR, STC communities sponsor competitions through which technical communicators have the opportunity to receive recognition for their work. Entries in the community competitions may receive an Excellence, Distinguished, or Merit Award. Each entry is judged against criteria that measure the degree of technical content, achievement of purpose, and technical execution, whether online or in a printed deliverable.

Competitions are open to technical communication professionals. You do not have to be a member of STC to participate. Entry fees are set by the community hosting the competition, and are payable directly to the community. Below is a list of communities hosting competitions, along with contact information for the competition manager. Other competitions may be added, so please refer to the competitions page on the STC website for the latest information.

Entries are submitted in the following four categories:

- Informational Materials
- Instructional Materials
- Promotional Materials
- User Support Materials

Competition Name: STC Chicago Technical Communication Competition
Sponsoring Chapter: STC Chicago
Competition URL: *www.stc-chicago.com/competition*
Entry Deadline: 27 October
Judge Application Deadline: 1 November
Competition Manager: MK Grueneberg; *marykay.stc@gmail.com*

Competition Name: Touchstone
Sponsoring Chapters: Berkeley, East Bay, Sacramento, San Francisco, Silicon Valley
Competition URL: *www.stc-touchstone.org/*
Entry Deadline: 7 October
Competition Manager: Nicki Davis; *touchstone@stc-berkeley.org*, (510) 333-0875

Competition Name: STC WDCB 2017 Technical Communication Competition
Sponsoring Chapter: Washington, DC-Baltimore Chapter
Competition URL: *http://competition.stcwdc.org/*
Entry Deadline: 18 November
Judge Applications Deadline: 30 November
Competition Manager: Tavia Record *competition_manager@stcwdc.org*

Competition Name: WMS-STC Technical Communication Competition 2017-2018
Sponsoring Chapter: West Michigan Shores Chapter
Competition Page URL: *https://sites.google.com/site/wmsstc/competition*
Entry Deadline: 3 November
Competition Co-managers: Peggy Frizzo *peggy.frizzo@dematic.com* and Sandy Balkema *sandybalkema@yahoo.com*

Jay R. Gould Award Call for Nominations

STC IS SEEKING NOMINEES for the 2018 Jay R. Gould Award for Excellence in Teaching Technical Communication. This award honors true academic mentorship; a record of successful students, defined as those who are involved in STC, and actively working in the profession; involvement in student activities outside of the classroom; innovation and creativity in teaching, and involvement in research that leads to changes in the way technical communication is taught.

The award is open to STC members who have belonged to the Society for at least ten years, have been involved in post-secondary education for at least fifteen years, and whose primary career is teaching the philosophy and theory of technical communication as a distinct discipline. Candidates can be nominated by department chairs, deans, colleagues, or students. Recommendations are due 2 October 2017, and recommended candidates must provide supporting materials by 13 November 2017. The chosen honorees will be notified after a vote by the STC Board of Directors in early 2018. The award will be presented at the Honors Reception at the 2018 STC Technical Communication Summit in Orlando, FL.

For more information, please visit *https://www.stc.org/jay-r-gould-award-excellence-teaching/*. For questions, please contact Jay R. Gould Committee Chair Pam Brewer at *brewer_pe@mercer.edu*, or STC staff liaison Elaine Gilliam at *elaine.gilliam@stc.org*. Good luck to the nominees!

Andrea Volpini: The Man Who Makes Web Content Talk

BY SCOTT ABEL | *STC Senior Member*

AS NEW DELIVERY CHANNELS like chat bots and voice interfaces take center stage, creating semantically-rich content becomes all the more important. Today, consumers around the globe are using their voice to search for answers. They ask questions aloud of your Web content, but, chances are, your website is not optimized to answer.

In this edition of "Meet the Change Agents," I interview semantic content rockstar, Andrea Volpini, the man who makes websites talk. You'll learn how many of the improvements we've made to our content—creating semantically-rich, modular, format-free, structured content—can help make your content accessible to consumers who use Amazon Alexa, Apple Siri, Google Home, and Microsoft Cortana.

Scott Abel: Andrea, thanks for making time to chat with me today about the importance of semantic content. For our readers who don't know who you are, and what you do, can you tell us a little bit about yourself?

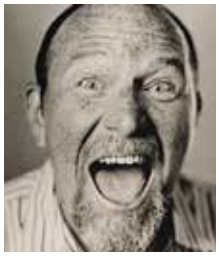
Andrea Volpini: I am Andrea Volpini. I'm very passionate about technology, and I spent the last 20-plus years experimenting with digital content in all sorts of ways. I am on a mission to find innovative ways to help people communicate online.

My business partner and long-time friend, David, and I have been "tech-business veterans," professionally coding for the Web since we first met in high school.

After spending several years building our own content management system, we began focusing on semantic technologies through applied research. The idea that the Internet is like Borges' famous *Library of Babel*, theoretically infinite, and that there are just hyperlinks to hold it together, was fascinating, but extremely tedious to deal with from the content management point of view.

For over 13 years, David and I managed the website of the Italian Parliament with one of our previous ventures. We had hundreds of thousands of Web pages "stitched together" that needed to be efficiently delivered to millions of users—each one with his/her own personal way of consuming information.

The vision of organizing content and creating a global



In the digital age, change happens quickly. This column features interviews with the movers and shakers—the folks behind new ideas, standards, methods, products, and amazing technologies that are changing the way we live and interact in our modern world. Got questions, suggestions, or feedback? Email them to *scottabel@mac.com*.

knowledge graph from millions of Web pages was groundbreaking. Since the very first article by Tim Berners-Lee on the Semantic Web published by *Scientific American* in 2001, we followed that path and began researching how these technologies could help us improve our own content management system.

These days, what keeps me awake at night is the idea of democratizing semantic technologies—bringing back full control to writers and editors over the metadata they produce when creating content.

SA: I remember our first meeting. You showed me WordLift, your solution for content teams designed to optimize Web content for findability. After the demonstration, I knew you were on to something important.

What is WordLift?

AV: You can ask Google that same question using voice search. Google will tell you that "WordLift is the first semantic plug-in for WordPress" that combines the artificial intelligence for language processing with markup automation. WordLift adds a semantic layer of linked data to your content that improves its findability. WordLift is a first mover in this emerging field of content marketing automation powered by semantic technologies. We have transitioned from a world of Web pages into a Web of data, and WordLift is one of these tools that helps editors get back control over their metadata—and by doing so—content becomes unquestionably understandable by machines.

The increasing volume of voice search and the rise of chatbots, voice interfaces, and intelligent agents is putting a lot of pressure on content creators and managers. Semantic structuring is no longer an option; it's a business imperative. The quality of the data, when an army of machine-learning algorithms are reorganizing the Internet, is a must-have for every organization, both large and small.

SA: Once I started using WordLift, my mind began to conjure up new and exciting uses for semantically rich content. I challenged you to develop some interesting examples of how knowledge graphs could help content producers add capabilities to their websites that are difficult, if not impossible, to develop without them.

Can you help our readers understand what a *knowledge graph* is, and why they need one?

AV: A graph is a mathematical model used to organize nodes and the relationships among these nodes. In 1736, a Swiss mathematician named Leonhard Euler, laid the foundation of the graph theory to explain why it was simply impossible to walk around the city of Königsberg using its seven bridges with a path that would cross each bridge only once (this is a historical problem known as the *Seven Bridges of Königsberg*).

A *knowledge graph* has nodes representing "things" in the real world and edges that connect these "things" in a meaningful way with simple statements that a computer can understand; e.g. (Andrea[node] > knows[edge] > Scott[node]). These statements are called *semantic triples.*

A computational search engine provides answers to its users rather than just links to Web pages. The database required to show you the population of your hometown, the most significant event on a given date, or the corresponding Babylonian pictogram of a number is a graph. Data has become the new Web, and this is why it's important for everyone to produce it, to control it, and to market it.

SA: For the past few decades, I have focused on helping organizations get the most value possible from their content. The problem is that most companies don't view content as an asset. They overlook it. They fail to understand its value as a source of revenue.

But things are starting to change—slowly, but surely. While content is (more often than not) the most overlooked asset in organizations today, I see dramatic changes on the horizon due in part because of the need for semantic content. In fact, machine learning systems and intelligent voice response systems like Amazon Echo, Google Home, and Apple Siri, require structured, semantically rich, modular content to function in useful ways.

What have you learned about these systems—and their content requirements—that you can share with technical communicators?

AV: You're right, Scott. Intelligent assistants and machine learning systems rely on structured semantically-rich content to provide answers to their users. Large organizations like Google, Microsoft, Facebook and Amazon all have their own giant graphs to run their services. Preparing content today is about tapping into these graphs by adding information that is relevant to your organization. It is also about creating your own graph to avoid dependencies from third parties. Even worse is to be squeezed by an asymmetric business model where the editor that creates the content doesn't retain its value since he/she doesn't own the publishing platform. Nor do they control the metadata generated by the platform. Data ownership is crucial, and content has to be produced with its metadata straight from the source.

If you're publishing content on the Internet, there are also other factors where high-quality structured data becomes essential. Factors like *dwell time* (a metric used by search engines to validate websites that combines user engagement, session duration, and SERP CTRs) can be controlled by improving the user experience. Artificial intelligence-based content recommendations are one of these promising technologies that can help readers find the content they want at the right time. To work efficiently, machine-learning algorithms for content recommendation need to leverage semantic data.

SA: You did some amazing demonstrations for me that used my content—and me—as the subject matter. In fact, I was super impressed when you asked Google Home and Apple's Siri about me and my upcoming webinar, and they knew the answers. How did you make that happen? It was magical.

AV: Thanks, Scott. I appreciate that. Making devices and websites talk is both cool and useful, but there is no magic involved; it's really just data. Google Home, Apple's Siri, Microsoft's Cortana, and Amazon's Alexa use information scattered around the Web, and WordLift really does two things: 1) It curates the data about us that we might have disseminated over social networks, Wikipedia, websites like Bloomberg, Crunchbase, or business directories like Yelp, and 2) It improves the confidence value for each statement by using structured data on our websites that *confirm* both the provenance and the validity for that statement.

Back in 2014 in a research paper, Google introduced the Knowledge Vault (KV), a massive database of world facts accumulated by indexing the Web. Facts in the KV contain a confidence value that is used to distinguish between knowledge statements that have the high probability of being true from others that are less likely to be true. Google's fact-checking bots continuously update information in the KV and our role is to ensure that they get what they need. This is what WordLift does by helping you create your own knowledge graph.

SA: What is required for these systems to make use of our content? Why is it that our current content doesn't work? What needs to change, and how do we do it?

AV: Adding structured data simplifies the life of crawlers and fact-checking bots. The vast majority of the content being created today is *unstructured* and this creates several issues, especially when machine learning is applied at scale to this content. We need to curate our content, the entities (the "things") that we care the most about, and the semantic layer that connects both. This is needed to improve the findability of our content and to prepare for a new generation of conversational apps. Chatbots, after all, really are the new websites. Enriched intelligent content (modular, structured, format-free, and semantic) is easy to find. It's also easy for personal digital assistants and smart agents to organize, process, and repurpose.

SA: My crystal ball is cracked; otherwise I might be able to see the future more clearly than I do now. What do you consider to be the future of content? What is driving these changes and what can technical communicators do to prepare themselves for the changes that are coming their way?

AV: I do agree with you that we cannot predict the future. In a way, the future is now. There are emerging forces in the content industry that will shape our future. As a technical communicator, I would look at the intersection between structured data and machine learning (this is an extremely promising field for the content industry and WordLift is really riding this wave) and blockchain-based media platforms. Projects like *Steemit* are based on a cryptocurrency that is used to reward content creators and users, and this is going to be a significant paradigm shift.

SA: Thanks for making time to share your insights and experiences with our readers. I appreciate your willingness to share what you know. I know our readers do, too.

AV: Thanks, Scott, it's a great pleasure for me to have the opportunity to talk about WordLift, our work on semantic technologies, and how the Web is getting smarter every day.

STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION

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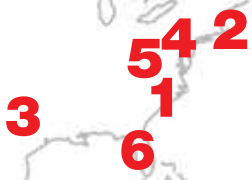


F.Y.I. lists information about nonprofit ventures only. Please send information to *intercom@stc.org.*

1 5-7 Oct
The **Council for Programs in Technical and Scientific Communication** (CPTSC) will hold its 2017 Annual Meeting, with a conference theme of User-centered Program Design, at the Georgia Conference Center in Savannah, GA.
CPTSC
http://www.cptsc.org/annual.html
conference2017@cptsc.org

2 8-10 Oct
The **Public Relations Society of America** will hold its 2017 International Conference 8-10 October at the Boston Marriott Copley Place in Boston, MA.
PRSA
(212) 460-1400

3 9-13 Oct
The **Human Factors and Ergonomics Society** (HFES) annual meeting, HFES 2017, will take place 9-13 October at the JW Marriot in Austin, TX.
HFES
https://www.hfes.org/web/HFESMeetings/2017annualmeeting.html

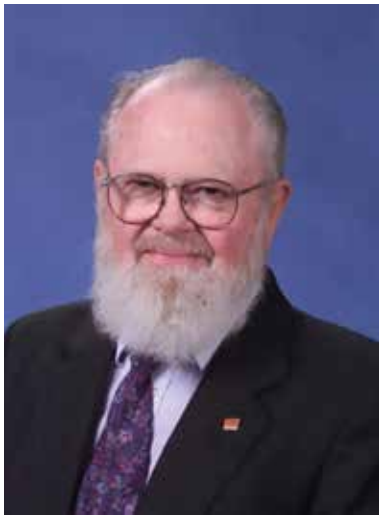
4 25-28 Oct
The **American Translators Association** (ATA) will hold its 58th Annual Conference 25-28 October at the Washington Hilton in Washington, DC.
ATA
https://www.atanet.org/conf/2017/
ata@atanet.org

5 27 Oct-1 Nov
The **Association for Information Science and Technology** (ASIS&T) will hold its 80th Annual Meeting 27 October-1 November at the Crystal City Hyatt in Arlington, VA.
ASIS&T
meetings@asist.org
(301) 495-0900

6 1-4 Nov
The **American Medical Writers Association** (AMWA) will hold its 2017 Medical Writing & Communication Conference 1-4 November at the Walt Disney World Swan and Dolphin Resort in Orlando, FL.
AMWA
conference@amwa.org
(240) 238-0940

In Memoriam: Andy Malcolm

ANN L. WILEY | *STC Fellow*



STC FELLOW ANDREW (ANDY) MALCOLM passed away 4 September 2017. For 29 years, Andy taught English at the National Technical Institute for the Deaf at the Rochester Institute of Technology. He also served on the Zoning Board of Appeals in Henrietta, NY, and the board of IRT Theater, a laboratory for independent theater in New York City that provides opportunities for deaf performers and audiences. Andy was active in the Society for Technical Communication, having joined in the Los Angeles Chapter in 1964, and the IEEE, where he was a life-long member. He also served as president of the Teachers of English and Language Arts special interest group of the Convention of American Instructors of the Deaf.

Andy earned diplomas in electricity in 1948 and 1950 from Saunders Trades & Technical High School and Westchester Community College in New York. He then worked as an electronics technician, design engineer, chief draftsman, and quality control administrator. Andy's first experience in technical writing came when he was asked to write parts of an instruction manual for equipment he was designing. Beginning in 1957, he was an engineering writer in the military and aerospace electronics industries. He returned to college and received a BS and MS in printing (1971, 1977). Between 1972 and retirement in 2001, he taught engineering and science English at the National Technical Institute for the Deaf (NTID) at the Rochester Institute of Technology (RIT). He also taught technical writing for the RIT College of Continuing Education and College of Liberal Arts and the Greece (NY) public schools.

Andy was a founding member of the Special Needs Committee of STC in 2001, which later became the Accessibility SIG. STC members recall Andy at many annual conferences. His good humor and kindness added to the lively gatherings. Rochester Chapter members recall his cheerful presence and support of newer members. At NTID, he was the unofficial historian and raconteur of the English department.

In his teaching, Andy developed multi-level reading comprehension curricula for deaf and hard-of-hearing students, and was a pioneer in integrating technology into classroom teaching. He applied electronics to teaching English to the deaf using the synchronous display of print with speech sound. His teaching methods were based on extensive research. Andy's work was published in *American Annals of the Deaf* and *Teaching English to the Deaf and Second Language Learners* and in STC journals. Andy received many awards for writing, including awards from STC and the Gannet Newspapers' Golden Pen award.

On the STC Special Needs Committee, Andy focused on deafness and hearing impairment. His 2002 presentation "Deafness, an Introduction" provided insights into challenges of deafness in being a technical communicator and into using simplified grammatical structures that are needed by prelingually deaf people and make reading easier for everyone. Andy also held several local and national offices in STC, including Secretary of the Society (2002–2004). The Rochester Chapter has published recollections of Andy's service to the chapter (*http://stc-rochester.org/andy-malcolm-memoriam/*).

In 2003 Andy considered researching aging for a Special Needs SIG paper, but decided instead to share personal experiences about aging. When Andy was five years old, his father died, so he learned the terminal nature of human life early on. Reflecting that life is engaging—tomorrow follows today, he noted the last act ends in death. He reports his first irreversible injury, an incisor broken while playing football in high school. He good-naturedly reports losses at 40, 50, 60, and his mid-sixties. In his seventies, Andy stayed in touch with long-time STC leaders enjoying active retirements. He reflected that he could "only extrapolate the future." For the last sixteen years, Andy was known as Santa Andy at Hansen Nature Center, Hochstein School of Music, and Andrus, where he lived as a teenager. Andy is survived by his wife, Kathleen Crandall, four children, eight grandchildren, and one great-grandson. Donations in his memory may be sent to Andrus, 1156 N. Broadway, Yonkers, NY 10701.

Source of photo: *http://newsletter.stc-carolina.org/50+Years+in+the+Making%3A+An+Interview+with+Andrew+Malcolm* This also appears on the IEEE Illumination Conference past presenters page.

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Points may be obtained the following ways:

Event	Points
STC Annual Membership (any membership type for Foundation certificants)	2
STC Recorded Webinar (self-study)	1
STC Live Educational Webinar (free, sponsored, and community webinars excluded)	2
STC Online Courses	6
STC Summit Pre-Conference Courses (full day)	6
STC Summit Pre-Conference Courses (half day)	3
STC Annual Summit	8
Begin and complete a college-accredited course related to the Technical Communication field	8
Published articles that relate to any aspect of *Technical Communication* (2/article)	2
Published books publicly available on topics related to *Technical Communication* (5/book)	5
Presentations at conferences related to aspects of *Technical Communication* (2/presentation)	2
Total needed within 2 years post-certification date	**12**

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